

The AH-4 Air Hydraulic Intensifier is a device used to convert air pressure to hydraulic pressure. It is a combination of two components, a specially designed Rotochamber and Hydraulic Master Cylinder.

The AH-4 is used to provide pressure to hydraulic disc brakes on air braked vehicles. The units are used on both on-highway and off-highway vehicles.

For complete service/maintenance information see service data sheet SD-11-1.

Maintenance kits for master cylinders:
For Brake Fluid — Pc. No. 289286
For Mineral Oil — Pc. No. 289287

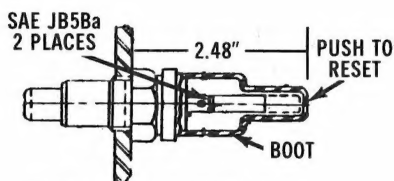
Power Ratio — 23.5:1
Max. Displacement — 6 cu. in.

Weight — Remote Res. — Approx. 39 Lbs.
Integral Res. — Approx. 42 Lbs.

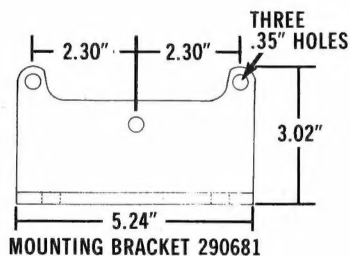
VMRS No. 13-006

Note: Detail part numbers may differ depending on type of fluid (mineral oil or brake fluid) used, and should not be interchanged.

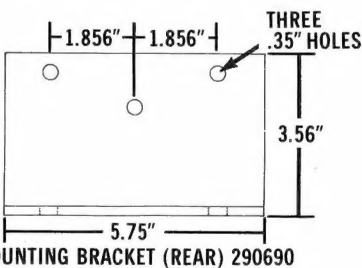
For Intensifier with Type 36 Rotochamber, see Catalog 11-A-1.



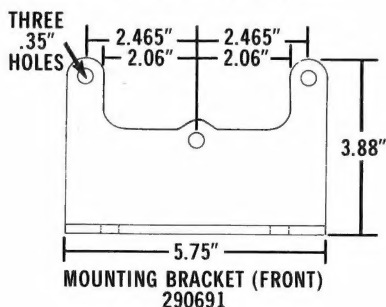
STROKE WARNING SWITCH 287131



MOUNTING BRACKET 290681

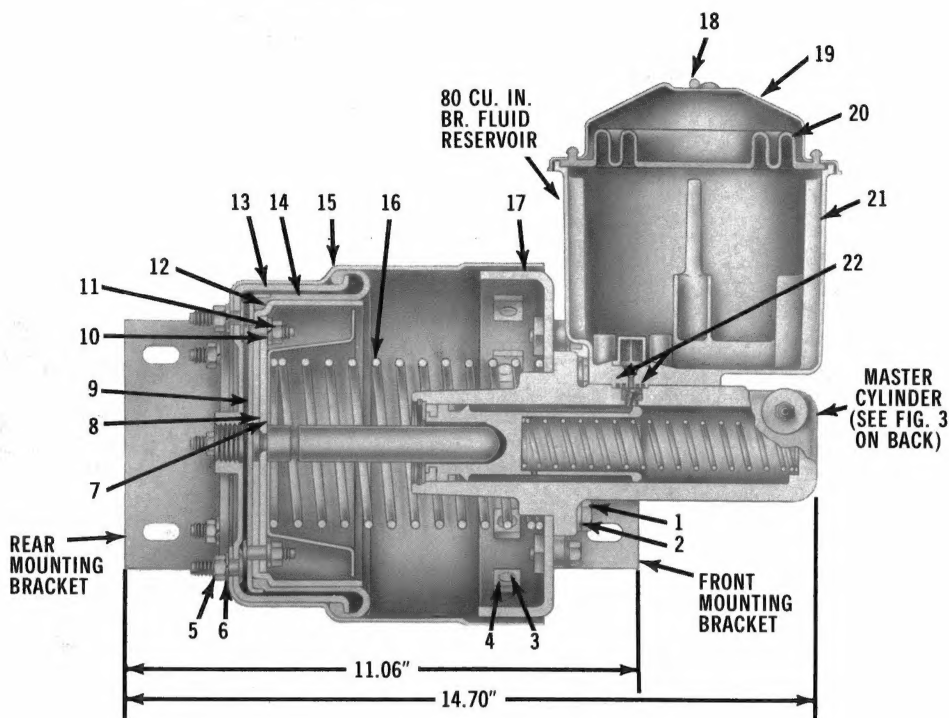


MOUNTING BRACKET (REAR) 290690



MOUNTING BRACKET (FRONT)
290691

TYPE 50 ROTOCHAMBER



COMMON SERVICE PARTS

| NO. | PC. NO. | QTY. | DESCRIPTION | NO. | PC. NO. | QTY. | DESCRIPTION |
|-----|---------|------|-------------------|-----|---------|------|-----------------------|
| 1 | 241957 | 4 | CAP SCREW 3/8 | 12 | 280523 | 1 | INNER DIAPHRAGM CLAMP |
| 2 | 237686 | 4 | LOCKWASHER 3/8 | 13 | 277834 | 1 | OUTER DIAPHRAGM CLAMP |
| 3 | 231826 | 8 | CAP SCREW 3/8 | 14 | 231491 | 1 | DIAPHRAGM |
| 4 | 201504 | 8 | LOCKWASHER 3/8 | 15 | 231490 | 1 | BODY |
| 5 | 202982 | 11 | LOCKWASHER 5/16 | 16 | 231498 | 1 | SPRING |
| 6 | 204514 | 11 | HEX NUT 5/16 | 17 | 289518 | 1 | COVER COMPLETE |
| 7 | 290682 | 1 | SPRING GUIDE | 18 | 290931 | 1 | BAIL |
| 8 | 286748 | 1 | PUSH ROD COMPLETE | 19 | 292174 | 1 | RESERVOIR COVER |
| 9 | 231494 | 1 | DIAPHRAGM GUIDE | 20 | 292175 | 1 | DIAPHRAGM |
| 10 | 202981 | 8 | LOCKWASHER 1/4 | 21 | 287157 | 1 | RESERVOIR BODY COMPL. |
| 11 | 203105 | 8 | HEX NUT 1/4 | 22 | 292214 | 1 | SEAL (BRAKE FLUID) |
| | | | | | 292939 | 1 | SEAL (MINERAL OIL) |

SUB ASSY AND DETAIL REFERENCE

| AH-4 HYD. INTENSIFIER ASSY. PC. NO. | ROTO- CHAMBER ASSY. | MASTER CYLINDER ASSY. | WARNING SWITCH | BOOT | DELIVERY (SEE FIG. 4) | | ROTOCHAMBER BRACKET | | BRACKET LOCATION | |
|--|---------------------------|-----------------------------|-------------------|--------|--------------------------|-------|------------------------|--------|---------------------|-------|
| | | | | | LEFT | RIGHT | FRONT | REAR | LEFT | RIGHT |
| INTEGRAL RESERVOIR (SEE FIG. 2) | | | | | | | | | | |
| 289542 | 289517 | 288398* | 287131 | 290959 | | X | 290681 | 290681 | | X |
| REMOTE RESERVOIR (SEE FIG. 1) | | | | | | | | | | |
| 286754 | 286745 | 286755 | 287131 | 290959 | | X | 290681 | 290681 | | X |
| 287070 | 286745 | 287069 | 287131 | 290959 | | X | 290691 | 290690 | X | |
| 289382 | 286745 | 287069 | NONE | NONE | | X | 290691 | 290690 | X | |

NOTE: ABOVE AH-4 INTENSIFIERS ARE O.E.M. INSTALLED BY MACK

*MINERAL OIL SYSTEM

TYPE 50 ROTOCHAMBER

FIG. 1

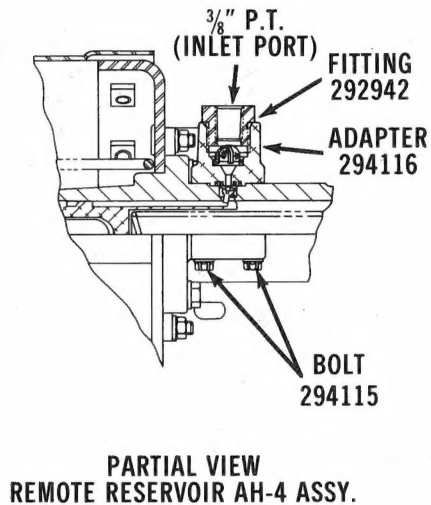


FIG. 2

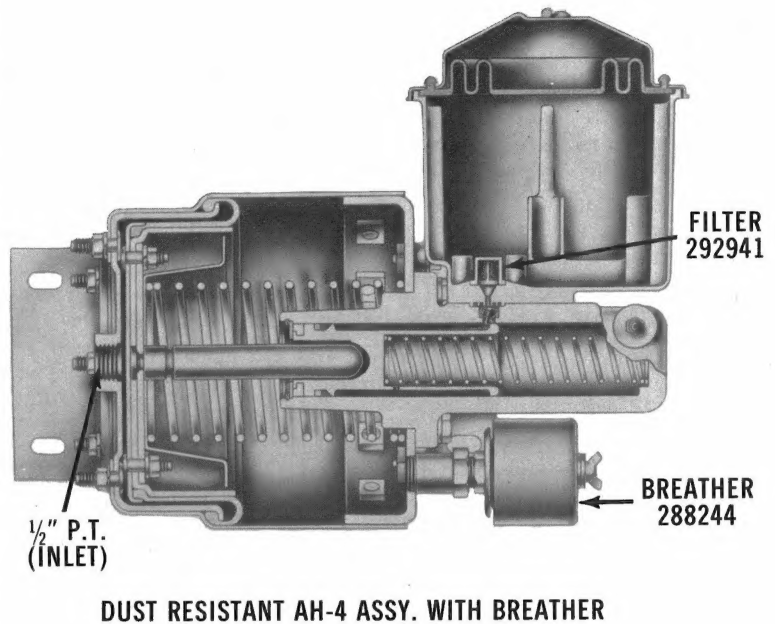


FIG. 3

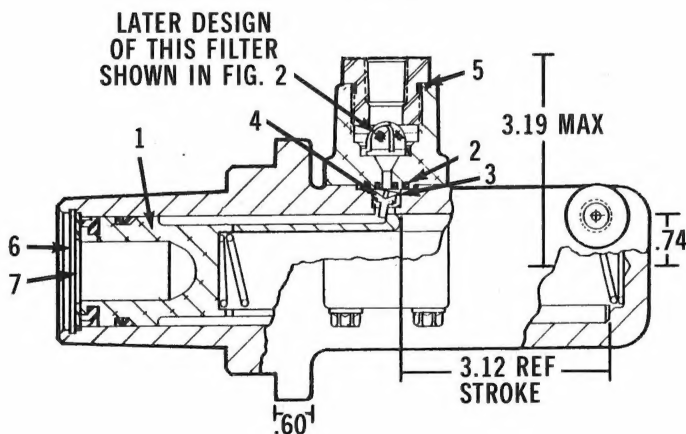
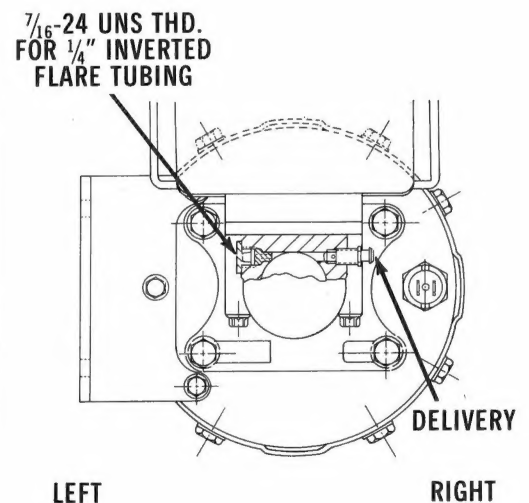


FIG. 4



LEFT HAND MOUNTING BRACKETS —
RIGHT HAND HYDRAULIC DELIVERY

MAINTENANCE KITS FOR MASTER CYLINDERS

FOR BRAKE FLUID — PC. NO. 289286

| NO. | PC. NO. | QTY. | DESCRIPTION |
|-----|---------|------|-----------------|
| 1 | 289283 | 1 | PISTON ASSEMBLY |
| 2 | 292214 | 1 | SEAL |
| 3 | 292933 | 1 | POPPET |
| 4 | 292934 | 1 | SPRING |
| 5 | 292936 | 1 | O-RING |
| 6 | 292937 | 1 | WASHER |
| 7 | 292938 | 1 | RETAINING RING |

FOR MINERAL OIL — PC. NO. 289287

| NO. | PC. NO. | QTY. | DESCRIPTION |
|-----|---------|------|-----------------|
| 1 | 289280 | 1 | PISTON ASSEMBLY |
| 2 | 292939 | 1 | SEAL |
| 3 | 292933 | 1 | POPPET |
| 4 | 292934 | 1 | SPRING |
| 5 | 292216 | 1 | O-RING |
| 6 | 292937 | 1 | WASHER |
| 7 | 292938 | 1 | RETAINING RING |